The reviewer has seldom seen a more carefully worked out thesis. It is both interesting and instructive, though as regards many conclusions the evidence is not yet at hand. In these days when environmental influences are so emphasized, it is well to have our attention focussed occasionally upon the part played by heredity. This the author has successfully done. It is to be hoped that medical men will heed the plea for better co-ordination of their studies to the end that we may all know better just what results, and how, in this great stream of organic development. There is no reason to doubt the accuracy of the author's belief that man is evolving to-day as much as ever. It is extremely important that we learn how to control such evolution.

I can only hope that all who chance to read these lines will get the book and study it. There will be no regret.

Carl Kelsey.

University of Pennsylvania.

Seligman, Edwin R. A. *Principles of Economics.* (American Citizen Series.) Pp. xlvi, 613. Price, $2.25. New York: Longmans, Green & Co., 1905.

Much interest will naturally centre in this recent addition to the rapidly increasing list of books presenting the general principles of economics by reason of the fact that its author easily takes a high rank among the most erudite exponents of the science. A novice may well have some hesitancy about attempting to pass a critical judgment upon the mature product of such scholarship; and, indeed, the present reviewer will not assume the task of estimating the worth of this book in all of its parts, nor will he do more than mention a few of its obvious merits and then consider in a cursory manner some phases of its theoretical expositions.

Before taking up his subject proper, the author devotes thirty pages to classified lists of general references and suggestions for the aid of students and teachers. This is by all odds the most complete assortment of economic literature yet given in any text-book. It may be added in this connection that each chapter throughout the work is preceded by a large list of references pertinent to the topics under discussion. In many cases these references serve a twofold purpose: they enable the author to make acknowledgment of indebtedness for suggestions and they also serve the more important purpose of directing the reader to sources of additional light upon the subject-matter of the chapter.

Limitation of space forbids a full statement of the arrangement of the book. Nearly one hundred and fifty pages are given over to an interesting description of the elements of economic life, such as its foundations, its conditions as expressed in private property, competition and freedom, and its development together with the development of its interpretation in thought. The author gives the subject of value a primacy not usually accorded it in texts, and he is particularly careful to emphasize the social aspects of the subject. So far as the reviewer's knowledge goes, this book is one of the first two in which the capitalization idea is applied to values in general—an idea destined to bear much fruit in the years to come. An important merit

of the work arises from the fact that it was written with particular reference to American conditions. The illustrative matter taken from American sources and presented in the form of tables, maps and charts would alone suffice to make the volume a valuable supplement to the literature used in connection with any general course in economics.

A few theoretical details will now be brought under review. On page 12 the author explains "the seeming opposition between wealth and value" (see also page 185). His explanation seems to imply that wealth is a quantum that may become more or less, whereas value expresses the relation of one quantum to another and is incapable of increase or diminution because when one quantum becomes greater in its relation to another quantum the second quantum becomes less by as much in its relation to the first. To some minds such a value concept will appear to fall short of expressing its essence. To say that x is worth 2y implies that in the estimation of an individual (or of the community) x and y possess a potency in common but in unequal degrees —each is capable of improving the well-being of man. The fundamental fact in the case is not that one can condition an improvement *twice as great* as the other, but rather that each alone can effect a positive and definite improvement in human welfare. Since the improvement due to the presence of y is only one-half that dependent upon x, x is said to be worth 2y— which is really the formula for price. If the improvement dependent upon a thing (*i. e.*, one unit of the supply) be called the effective utility of the thing, which is the same as its marginal utility, then it takes only one step to formulate a concept of value covering its essence everywhere and all the time—whether for a Crusoe or for a society with well developed markets. Value is effective utility. Because the effective utility of one thing happens to be expressed in terms of the effective utility of another thing, an increase in the effective utility of the first thing does not imply a decrease in the effective utility of the second thing. The second may have decreased, but very likely it has not—so that there is a total increase of effective utility, which means an increase of total value and hence of wealth.

The above line of thought leads to a conclusion directly opposed to that of the author when he says: "There may be a general rise or fall of prices, . . . there cannot be a general rise or fall of values, . . ." (page 185). Indeed, there may be a general rise or fall of values, but there cannot be a *general* rise or fall of prices, because of the reciprocal nature of price, since the term means the amount of one commodity that is given in exchange for another. For practical purposes, however, there may be a rise or fall of prices based on variations in the value of particular commodities while assuming that there has been no change in the value of the commodity in terms of which the value of the other commodities is expressed.

Again, in distinguishing between marginal utility and total utility the author attaches an unusual meaning to the former. He says: "The marginal utility of the stock" of apples "is always equal to the marginal utility of the final unit multiplied by the number of units" (page 176). Most writers restrict the term marginal utility to the utility of the "final" unit. Unfortunately there is employed in common usage no term to express the result of

multiplying the marginal utility by the number of units except the term *value,* nor is this term always used to express this product, because many writers (including of course the author) regard value as something other than utility. However, it is perhaps not best to make the term marginal utility do double duty as Professor Seligman has done, and if it is desired to use some other term than value to distinguish that part of utility which has efficiency in conditioning human welfare from the total utility derived from a stock, perhaps no better term could be employed than that of "effective utility." The effective utility of a stock of apples is the utility of the marginal apple multiplied by the number of apples. This effective utility of the stock is also the value of the stock of apples.

What is the author's conception of normal price? That price which results from an equilibrium of normal demand and normal supply (pages 245, 246, 247). This is good. But when are demand and supply in normal equilibrium? Certainly not when units of the supply are produced at varying costs as the author implies (pages 246, 247). This condition would give the market price. Demand and supply can never be in equilibrium in any enlightening sense of the phraseology unless all units of the supply are produced at the same costs. If there is any advantage anywhere it tends to disappear under competition and the equilibrium would exist only after the advantage had disappeared. When all of the productive factors are so placed that there is no inducement for any one of them to locate itself elsewhere in the industrial system then there is equilibrium and the resulting prices are normal prices.

This review has already transgressed beyond the space limits assigned to it, so that the author's treatment of distribution can only be mentioned. The final productivity principle is given an important function in apportioning the shares. In his view ordinary profits arise from a differential advantage in production and tend to disappear under competition, but abide because new advantages appear (page 353). Wages tend to conform to the contribution which labor makes to the product, though the standard of life is of importance in indirectly affecting the size of the product (page 419). On the subject of capital and interest, including rent, a Clark-Böhm-Bawerk-Carver-Fetter view of the matter is presented together with some additional reflections.

The point just made suggests the thought that the author, like Adam Smith, possesses a cosmopolitan mind which enables him in many cases to present more than one view and explanation of the same matter. This cosmopolitan spirit which runs through the work will commend it to a larger circle of readers. Finally, the book deserves and will no doubt receive a wide circulation as a supplementary college text.

ENOCH MARVIN BANKS.

University of Pennsylvania.